Impact of Shore-Based Power on California's Electricity System

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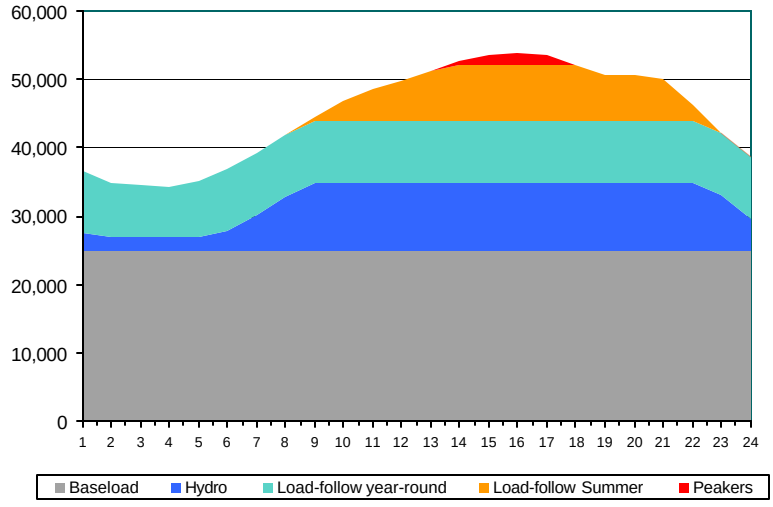
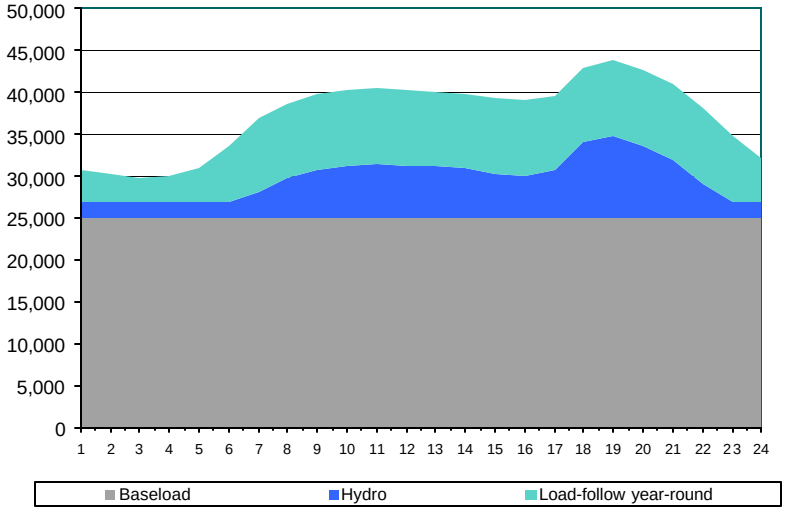
Presentation Overview

- Typical Electricity Load Profiles
- Electricity Supply Outlook
- Electricity System Concerns for 2005 and beyond
- Recommendations from Integrated Energy Policy Report
- Electricity regulatory activities that may affect new loads including Shore-Based Power
- Conclusions

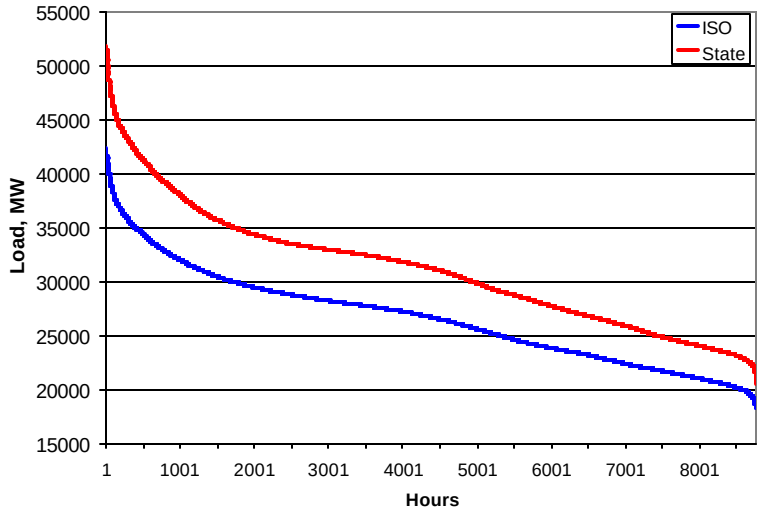
Typical Peak Day Profile Supply/Demand



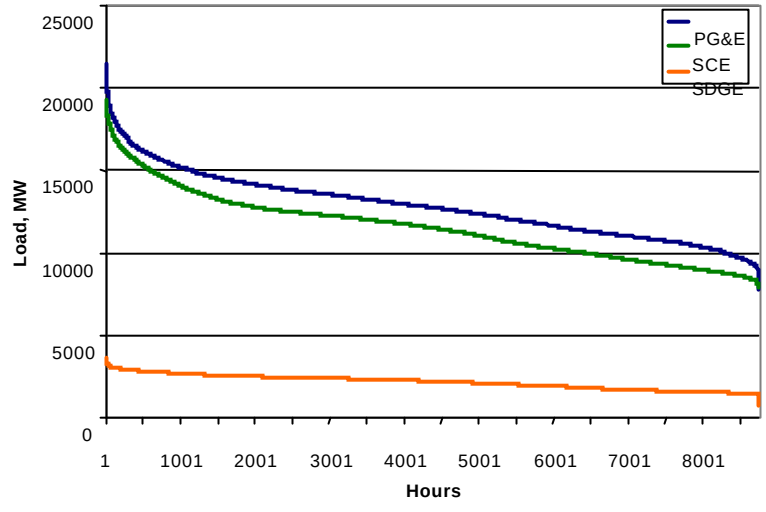
Typical Off-Peak day Profile Supply/Demand



Statewide Load Duration

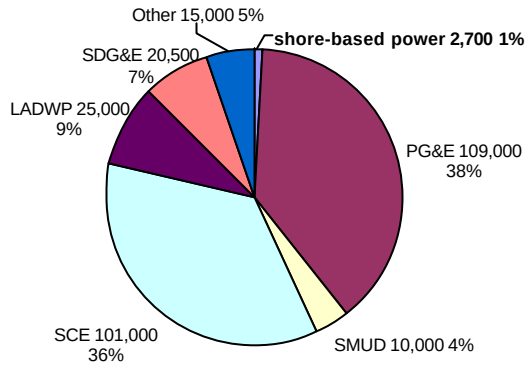


Utility Load Duration



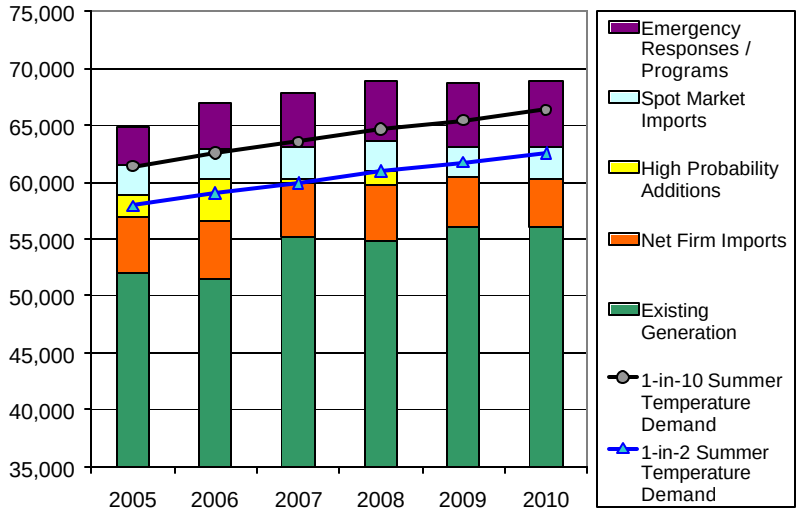
Energy consumption from shore-based power

(GWh)



Assumes continuous power at maximum capacity (309 MW)
24 hours per day, 365 days per year.

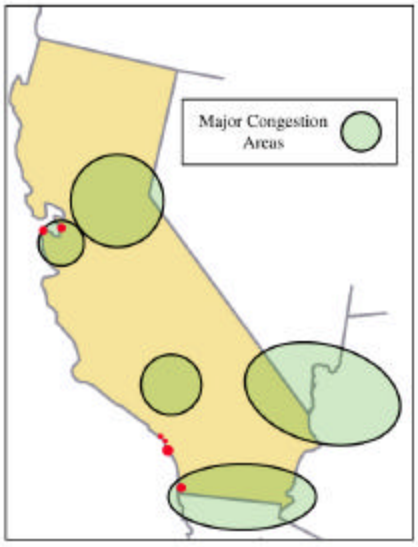
Supply/Demand Outlook



Electricity System Concerns (Near Term)

- Southern California: Reserves unacceptably low under normal and hot weather conditions.
- Statewide: Reserves low under hot weather conditions.
- Regional and local transmission congestion limits resource options
- Potential aging power plant retirements may further reduce reserves

Congestion Areas



Integrated Energy Policy Report Recommendations

- Accelerate Demand Response programs
- Increase energy efficiency
- Improve sharing of existing resources
- Increase use of renewable energy
- Increase use of Distributed Generation
- Comprehensive transmission planning

Regulatory Activities that may affect Cold Ironing at California Ports

- Resource Adequacy requirements implemented by 2006
- Direct Access legislation (core/non-core) that will allow large customers to contract directly with load serving entities.

Summary/Conclusions

- Energy and Capacity necessary to serve Cold Ironing at California Ports is not likely to cause a significant impact to the electricity system.
- New generation will be needed to meet expected loads in the future with or without Cold Ironing.
- Direct Access may allow ports to contract directly with private energy suppliers.
- Peak Pricing and Interruptible Program participation could further reduce impact to electricity system and lower cost.